

## ABSTRACT

## IMPROVEMENTS IN OR RELATING TO POLYPHASE RECEIVERS

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A polyphase receiver comprises an RF front end (10 to 28) for receiving a wanted data signal modulated on a carrier signal and for producing quadrature related low IF signals, an image rejection filter formed by a polyphase filter (30) for filtering the quadrature related low IF signals, soft 10 limiting means(36,38) for compressing the dynamic range of the filtered quadrature related IF signals and a signal demodulator (41) for recovering the data signal. The soft limiting means(36,38) has a characteristic which is substantially linear at signal levels 10dB below a predetermined minimum wanted signal level, moves into compression for higher signal levels and hard 15 limits at substantially 10 dB above the desired receiver sensitivity which avoids degrading the sensitivity of the receiver.

(Figure 1)

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